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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,312	08/15/2001	Peter Lind	PHRM-0366	3604

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WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP
ATTENTION: SUZANNE E. MILLER ESQ.
ONE LIBERTY PLACE, 46TH FLOOR
PHILADELPHIA, PA 19103

EXAMINER

JIANG, DONG

ART UNIT	PAPER NUMBER
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1646

DATE MAILED: 12/12/2002

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,312

Applicant(s)

LIND, PETER

Examiner

Dong Jiang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-79 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-22, 25-29, and 67-72, drawn to an isolated nucleic acid encoding a polypeptide, a vector containing same, a host cell thereof, and a method of recombinantly producing the encoded polypeptide, classified in class 435, subclass 69.1.
- II. Claims 23 and 24, drawn to an antisense oligonucleotide, classified in class 514, subclass 44.
- III. Claims 30-35, drawn to an isolated polypeptide, classified in class 530, subclass 350.
- IV. Claims 36-38, drawn to an isolated antibody, classified in class 530, subclass 387.9.
- V. Claim 39, drawn to a method of inducing an immune response in a mammal with the polypeptide, classified in class 514, subclass 2.
- VI. Claims 40-43, drawn to a method for identifying a compound binding to the polypeptide, classified in class 435, subclass 7.1.
- VII. Claims 44 and 74-77, drawn to a compound binding to the polypeptide, classification depending upon the chemical entity of the compound.
- VIII. Claims 45 and 46, drawn to a method for identifying a compound binding to the nucleic acid, classified in class 435, subclass 6.
- IX. Claim 47, drawn to a compound binding to the nucleic acid, classification depending upon the chemical entity of the compound.
- X. Claims 48-51, drawn to a method for identifying a compound modulating the activity of the polypeptide, classified in class 435, subclass 7.1.
- XI. Claim 52, drawn to a compound modulating the activity of the polypeptide, classification depending upon the chemical entity of the compound.

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- XII. Claims 53-55, drawn to a method of identifying an animal homolog of nGPCR-1079 by nucleic acid sequence analysis, classified in class 435, subclass 6.
- XIII. Claims 56-66, drawn to a method of screening for a mutation for diagnosis by assaying the nucleic acid sequences and expression or activity of the polypeptide, classified in class 435, subclass 6.
- XIV. Claim 73, drawn to a method for identifying a compound modulating the activity of the polypeptide, classified in class 435, subclass 7.1.
- XV. Claims 78 and 79, drawn to a method of purifying a G protein, classified in class 435, subclass 7.1.

The inventions are distinct, each from the other because:

The nucleic acids of Invention I is related to the antisense oligonucleotide of Invention II as they are complementary to each other. However, they are partentably distinct each from the other because the nucleic acids of Invention I are not required for Invention II, and they are used in materially different processes, and are for different purposes. The arts for antisense therapy and recombinant production of proteins are separated and distinct, and require non-coextensive searches.

The nucleic acids of Invention I is related to the polypeptide of Invention III by virtue of encoding same. The DNA molecule has utility for the recombinant production of the protein in a host cell. Although the DNA molecules and proteins are related since the DNA encodes the specifically claimed protein, they are distinct inventions because they are physically and functionally distinct chemical entities, and the protein product can be made by another and materially different process, such as by synthetic peptide synthesis or purification from the natural source. Further, the DNA may be used for processes other than the production of the protein, such as nucleic acid hybridization assay.

The method of Invention I is related to the protein of Invention III as process of making and product made. The Inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP 806.05(f)). In the instant case the product as claimed may be isolated from their natural source or made by chemical peptide synthesis.

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The nucleic acid of Invention I is distinct from and unrelated to the antibody of Invention IV, and the compounds of Inventions VII, IX and XI, because they are physically and functionally distinct chemical entities which share neither structure nor function. Also, neither is required for the manufacture of the other. The method of Invention I is distinct from and unrelated to the antibody of Invention IV, and the compounds of Inventions VII, IX and XI because the antibody or the compounds may be neither made by nor used in the method.

Invention I is distinct from and unrelated to Inventions V, VI, X, and XII-XV, wherein the nucleic acid of Invention I is neither made by nor used in the methods of Inventions V, VI, X, and XII-XV, and wherein each does not require the other.

Invention I is related to Invention VIII as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed may be used for the production of the polypeptide of Invention III.

The antisense oligonucleotide of Invention II is distinct from and unrelated to the polypeptide of Invention III, the antibody of Invention IV, and the compounds of Inventions VII, IX and XI, because they are physically and functionally distinct chemical entities which share neither structure nor function. Also, neither is required for the manufacture of the other.

Invention II is distinct from and unrelated to Inventions V, VI, VIII, X, and XII-XV, wherein the antisense oligonucleotide of Invention II is neither made by nor used in the methods of Inventions V, VI, VIII, X, and XII-XV, and wherein each does not require the other.

The polypeptide of Invention III is related to the antibody of Invention IV by virtue of being the cognate antigen, necessary for the production of the antibodies. Although the protein and antibody are related due to the necessary steric complementarity of the two, they are distinct inventions because they are physically and functionally distinct chemical entities, and because the protein can be used another and materially different process from the use for production of the antibody, such as in a pharmaceutical composition in its own right, or in assays for the identification of agonists or antagonists of the protein.

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Invention III is related to Inventions V, VI, X, and XV as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed may be used as a pharmaceutical composition in its own right.

The polypeptide of Invention III is distinct from and unrelated to the compounds of Inventions VII, IX and XI, because they are physically and functionally distinct chemical entities, which share neither structure nor function. Also, neither is required for the manufacture of the other.

Invention III is distinct from and unrelated to Inventions VIII and XII-XIV, wherein the polypeptide of Invention III is neither made by nor used in the methods of Inventions VIII and XII-XIV, and wherein each does not require the other.

Invention IV is distinct from and unrelated to Inventions V, VI, VIII, X, and XII-XV, wherein the nucleic acid of Invention I is neither made by nor used in the methods of Inventions V, VI, VIII, X, and XII-XV, and wherein each does not require the other.

The antibody of Invention IV is distinct from and unrelated to the compounds of Inventions VII, IX and XI, because they are physically and functionally distinct chemical entities, which share neither structure nor function. Also, neither is required for the manufacture of the other.

Inventions V, VI, VIII, X, and XII-XV are drawn to independent methods, wherein each of the methods has different process steps, different active agents, different starting and ending points, and is for a different purpose, such that they require separate searches.

The compounds of Inventions VII, IX and XI are distinct each from the other because they are physically and functionally distinct chemical entities, which share neither structure nor function. Also, neither is required for the manufacture of the other.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and/or recognized divergent subject matters, restriction for examination purposes as indicated is proper.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Advisory Information

Any inquiry concerning this communication should be directed to Dong Jiang whose telephone number is 703-305-1345. The examiner can normally be reached on Monday - Friday from 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached on (703) 308-6564. The fax phone number for the organization where this application or proceeding is assigned is 703-308-0294.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



**LORRAINE SPECTOR
PRIMARY EXAMINER**

DJ
11/22/02